

FIG. 1

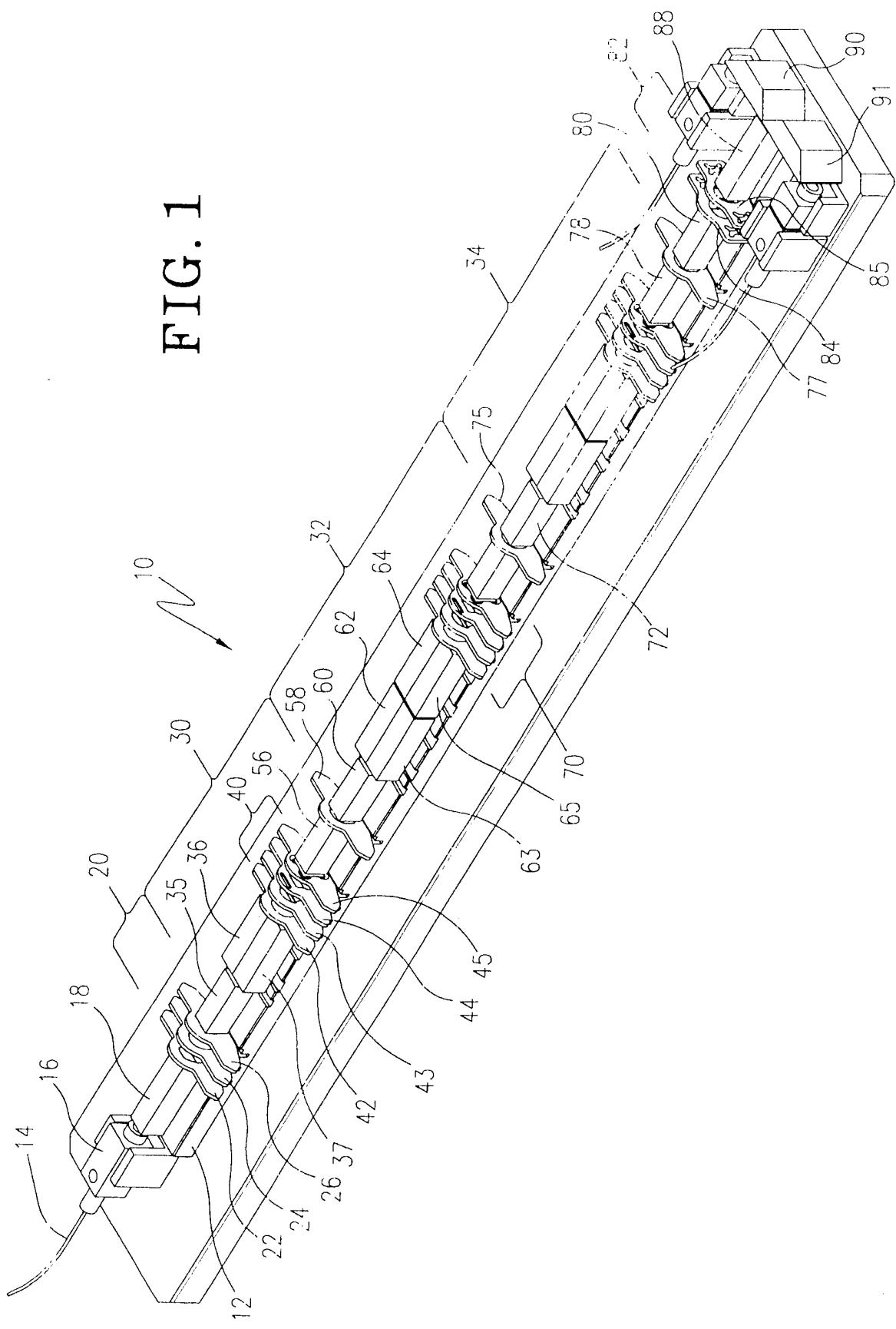


FIG. 3

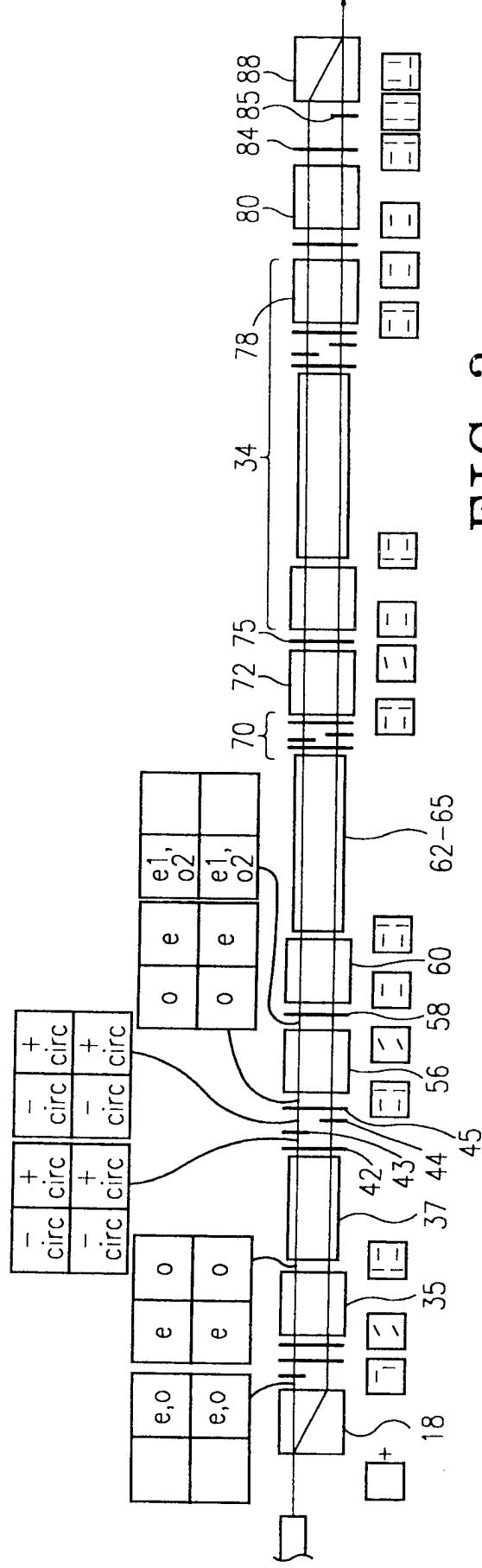


FIG. 2

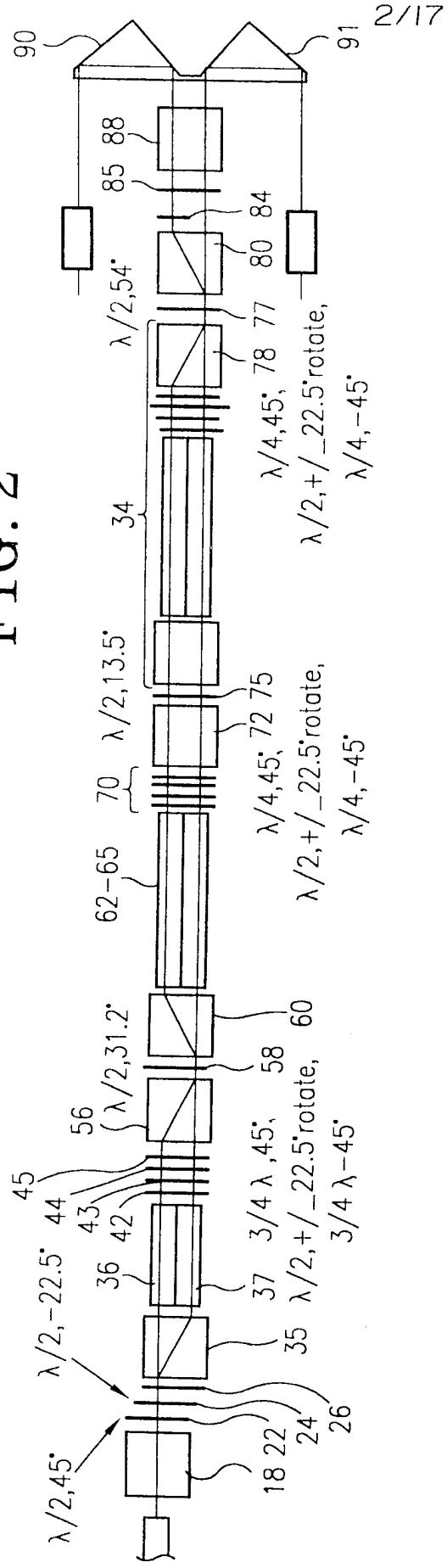


FIG. 4

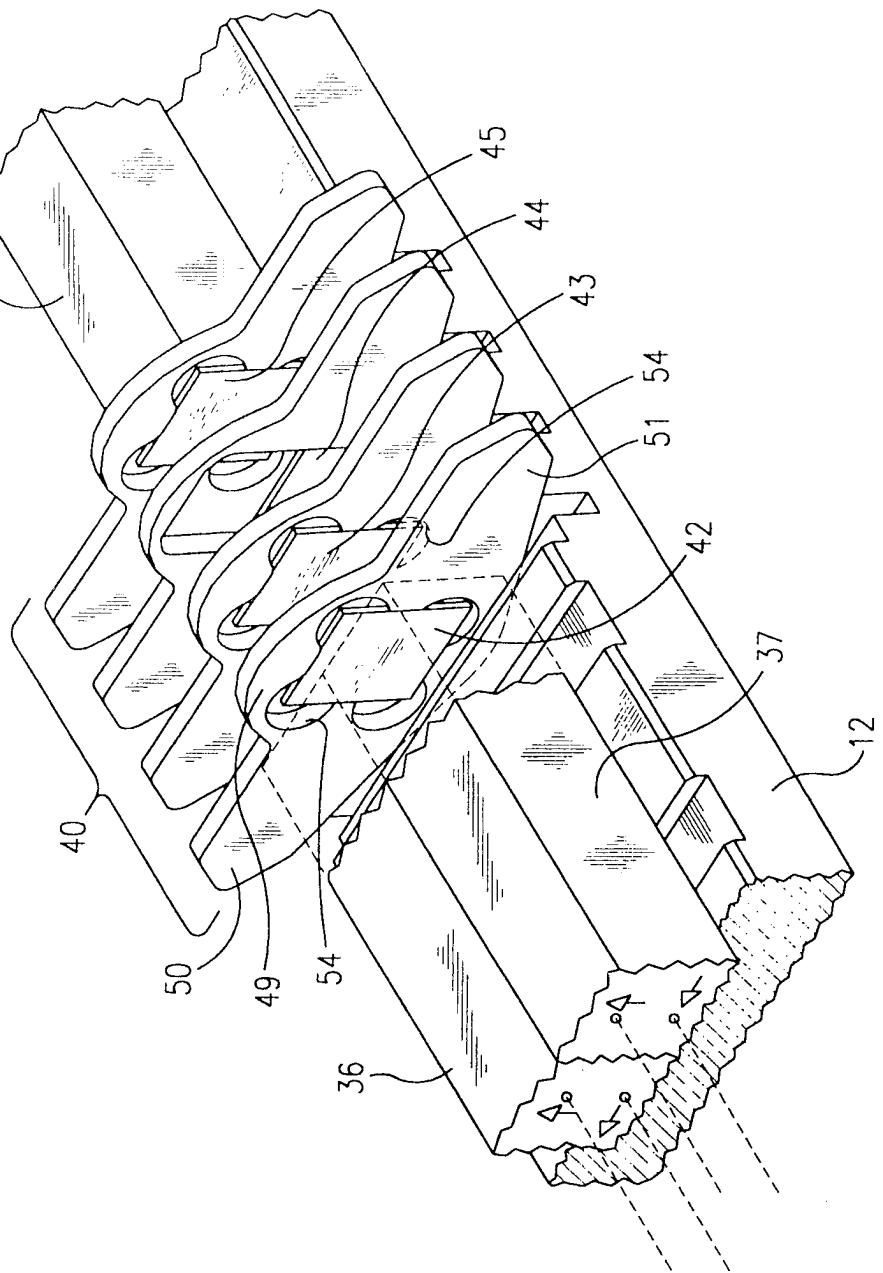
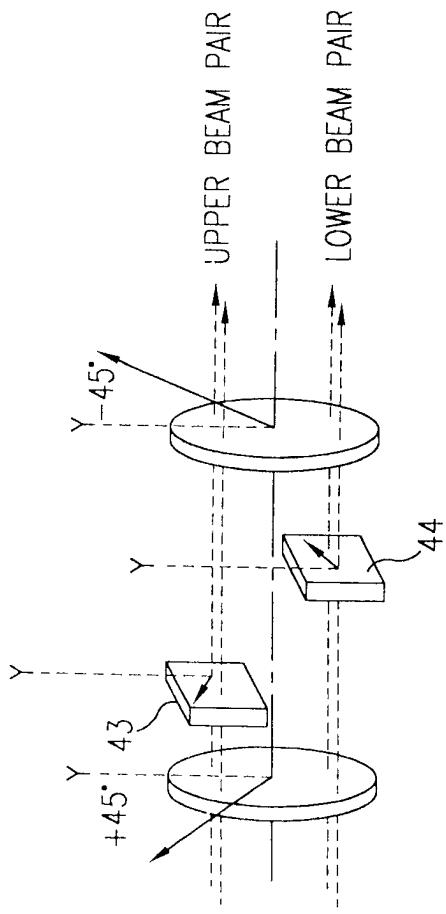


FIG. 5



4/17

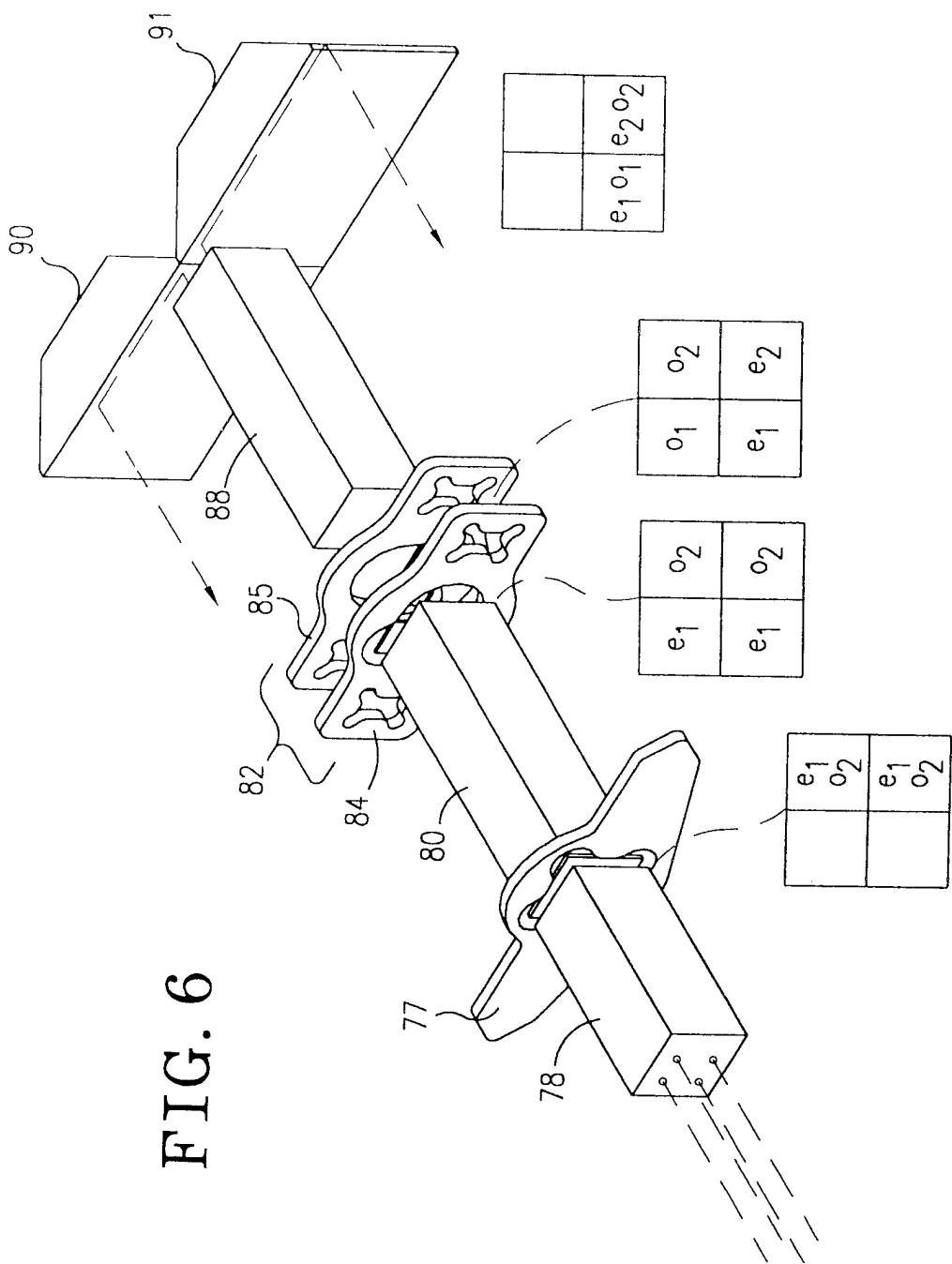
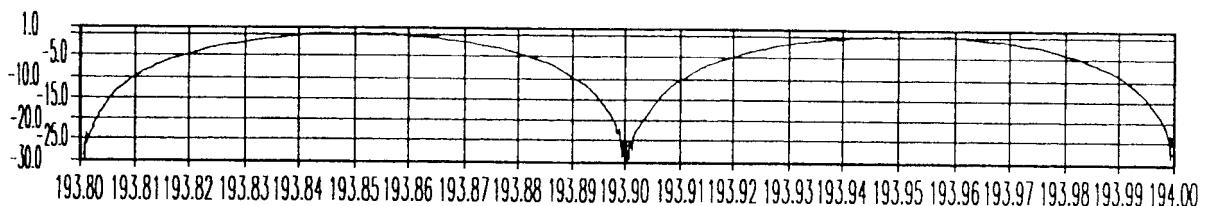
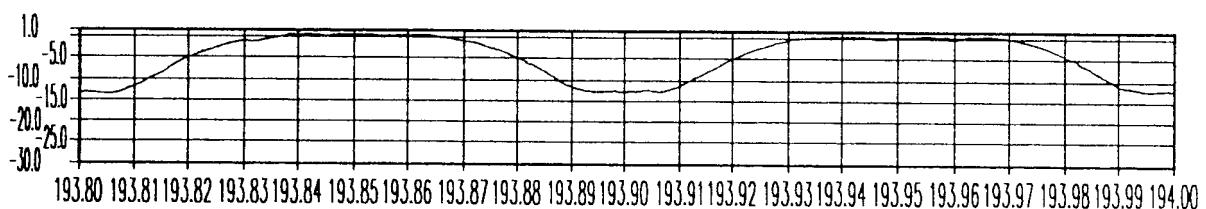


FIG. 6

stage1:channel separation



stage2:passband flattening



stage3:crosstalk reduction

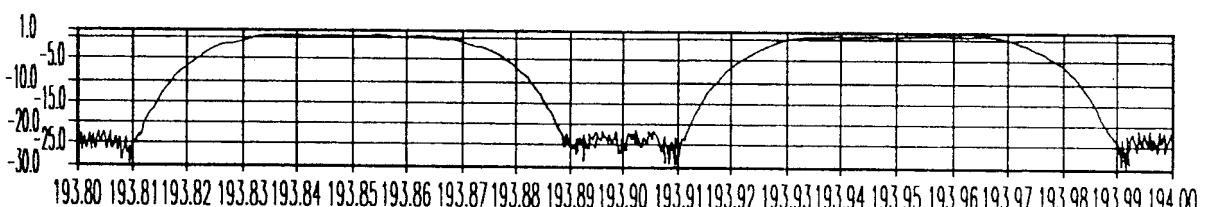


FIG. 7

Effect of multiple stages on interleaver transmission characteristics

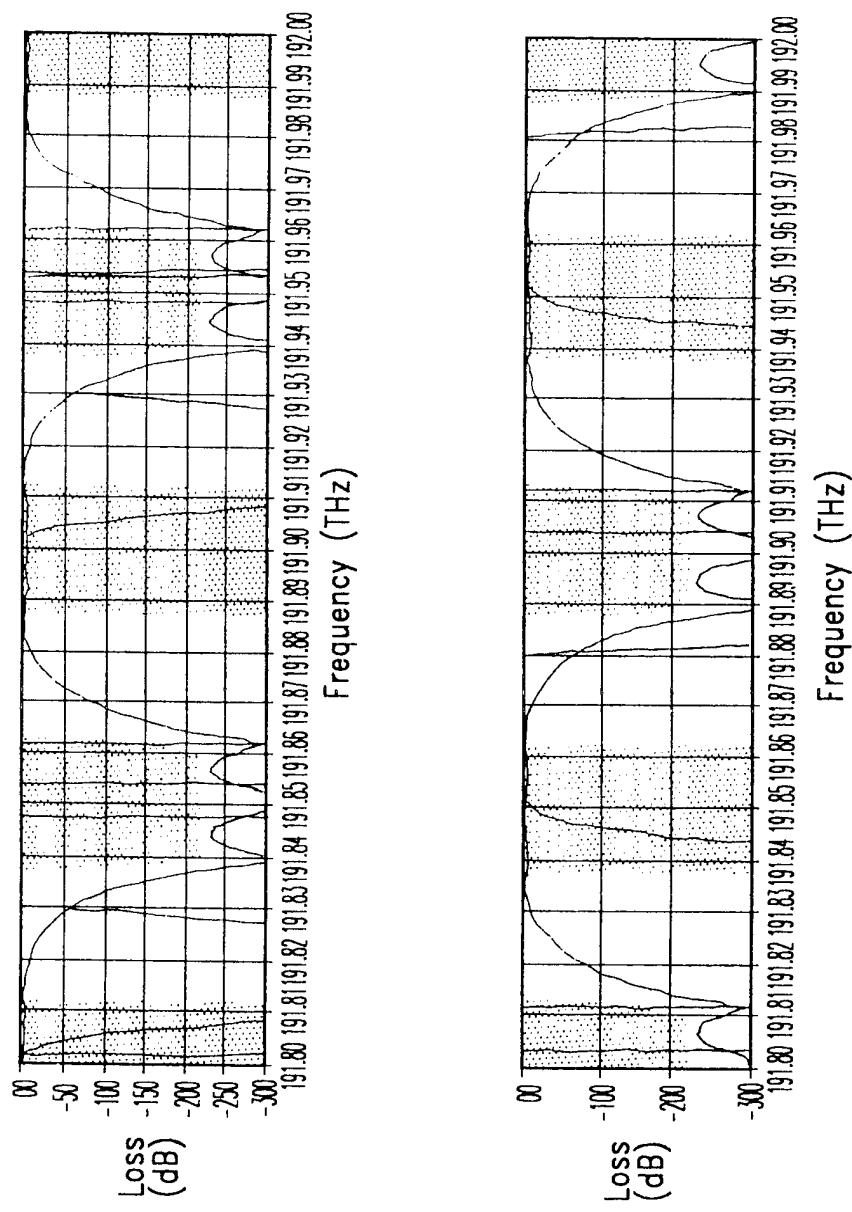


FIG. 8 Optical response of a three stage 50 GHz interleaver

FIG. 9

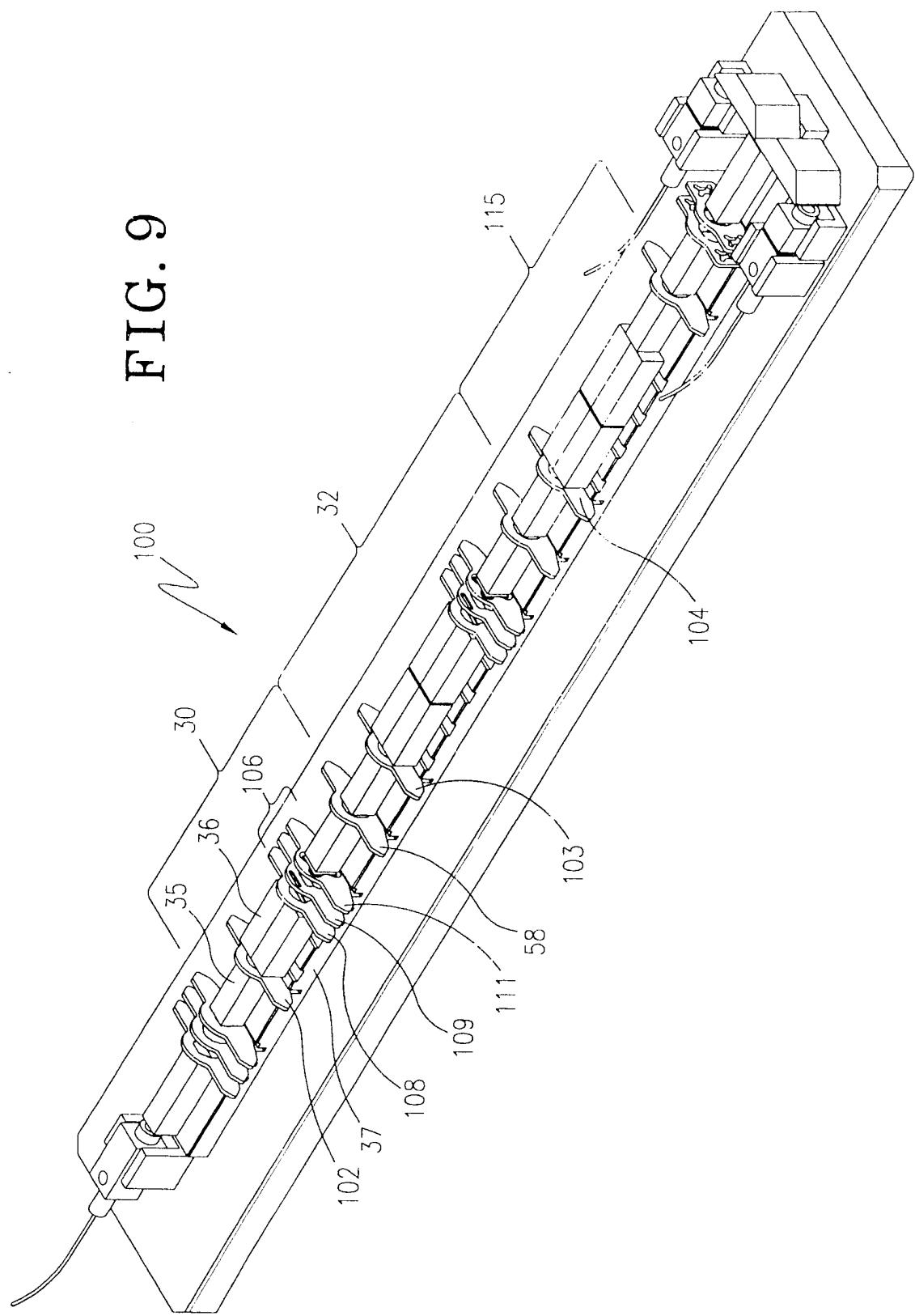
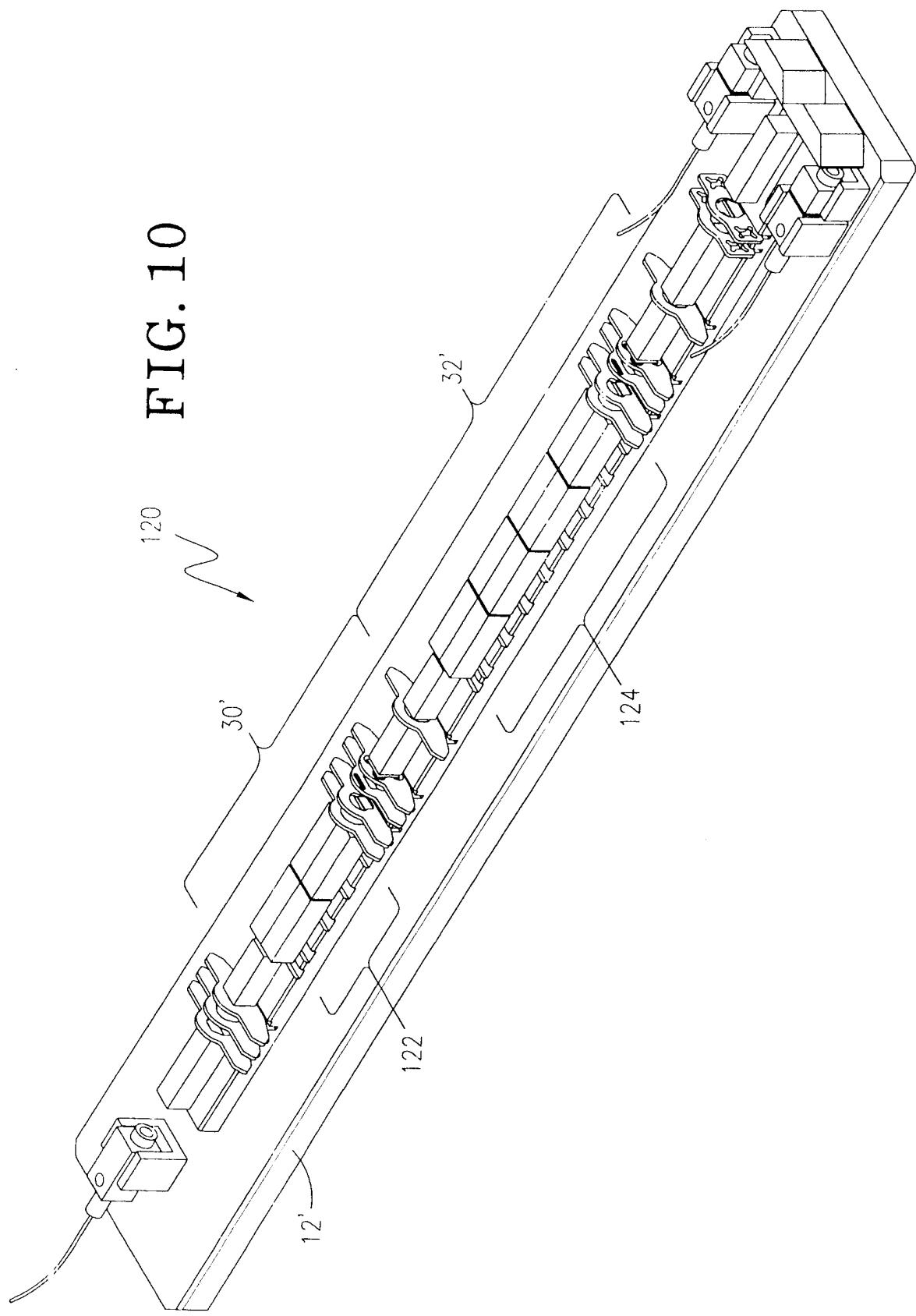
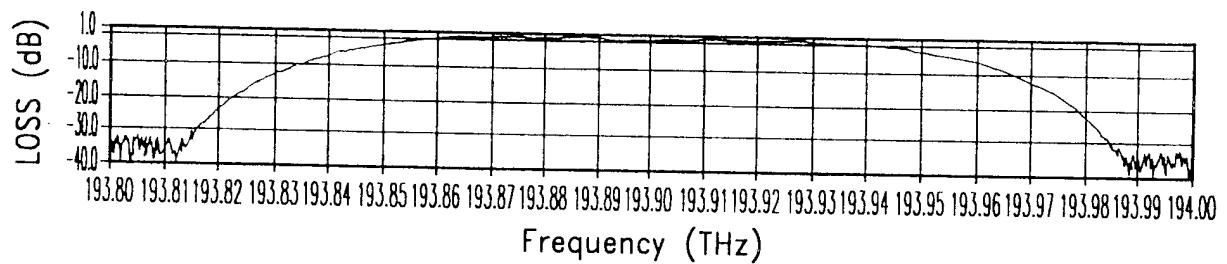


FIG. 10

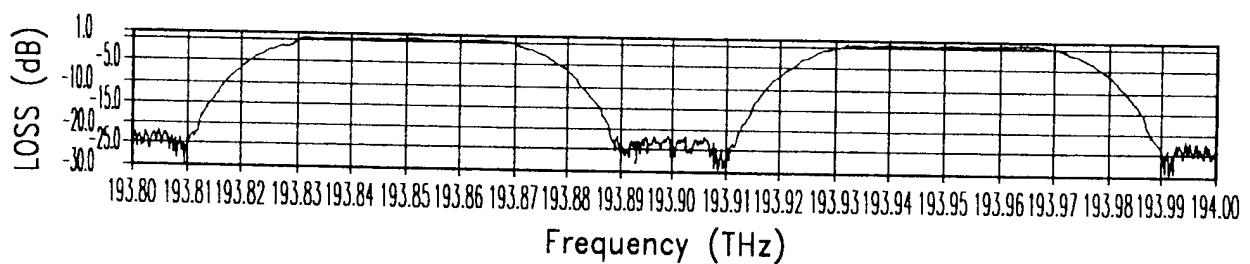


9/17

100GHz



50GHz



25GHz

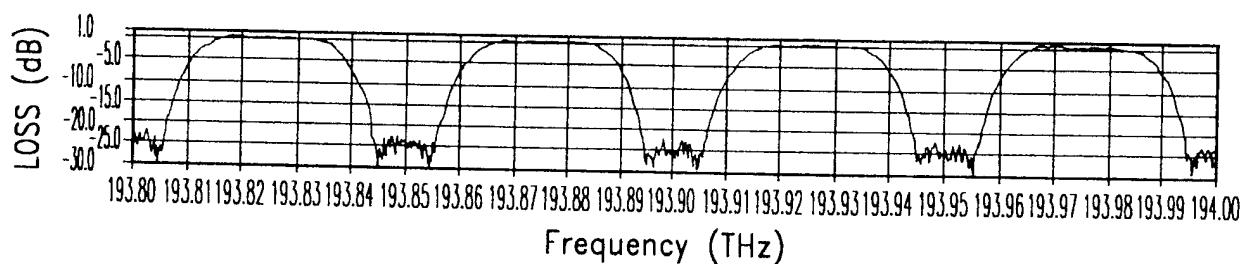
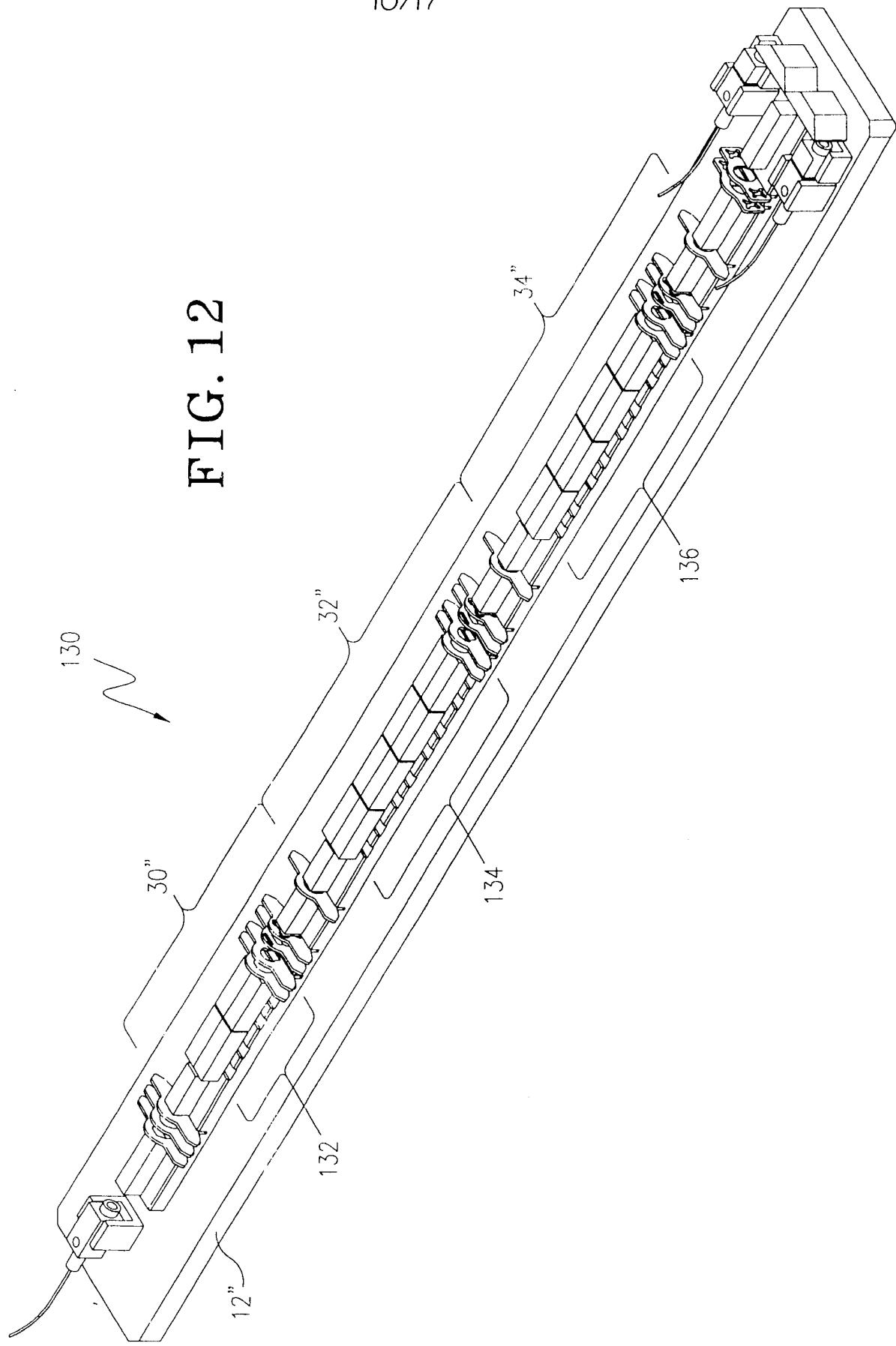


FIG. 11

Comparison of 100, 50, 25 GHz interleaver responses (one output only)

FIG. 12



11/17

FIG. 13

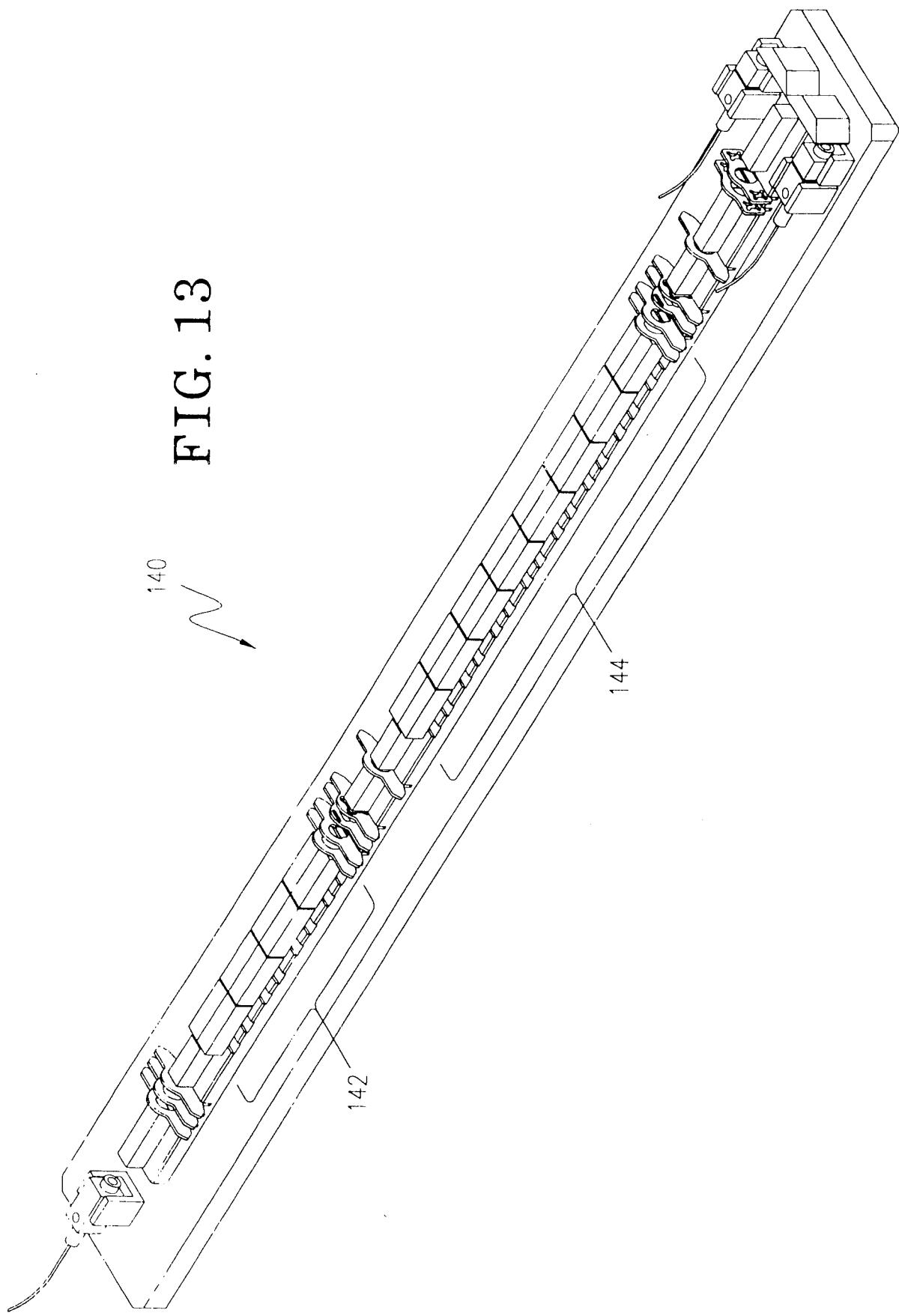


FIG. 15

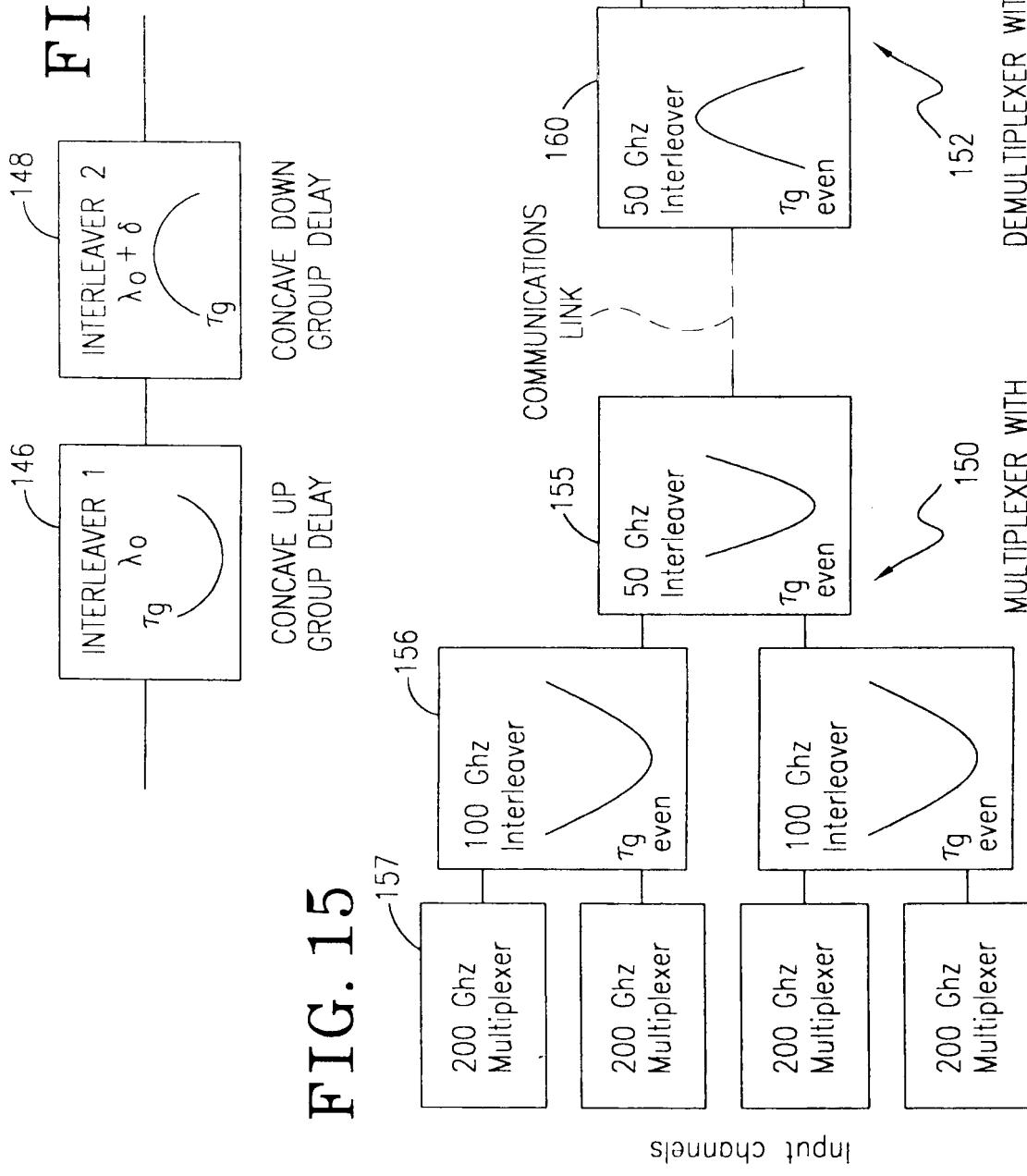
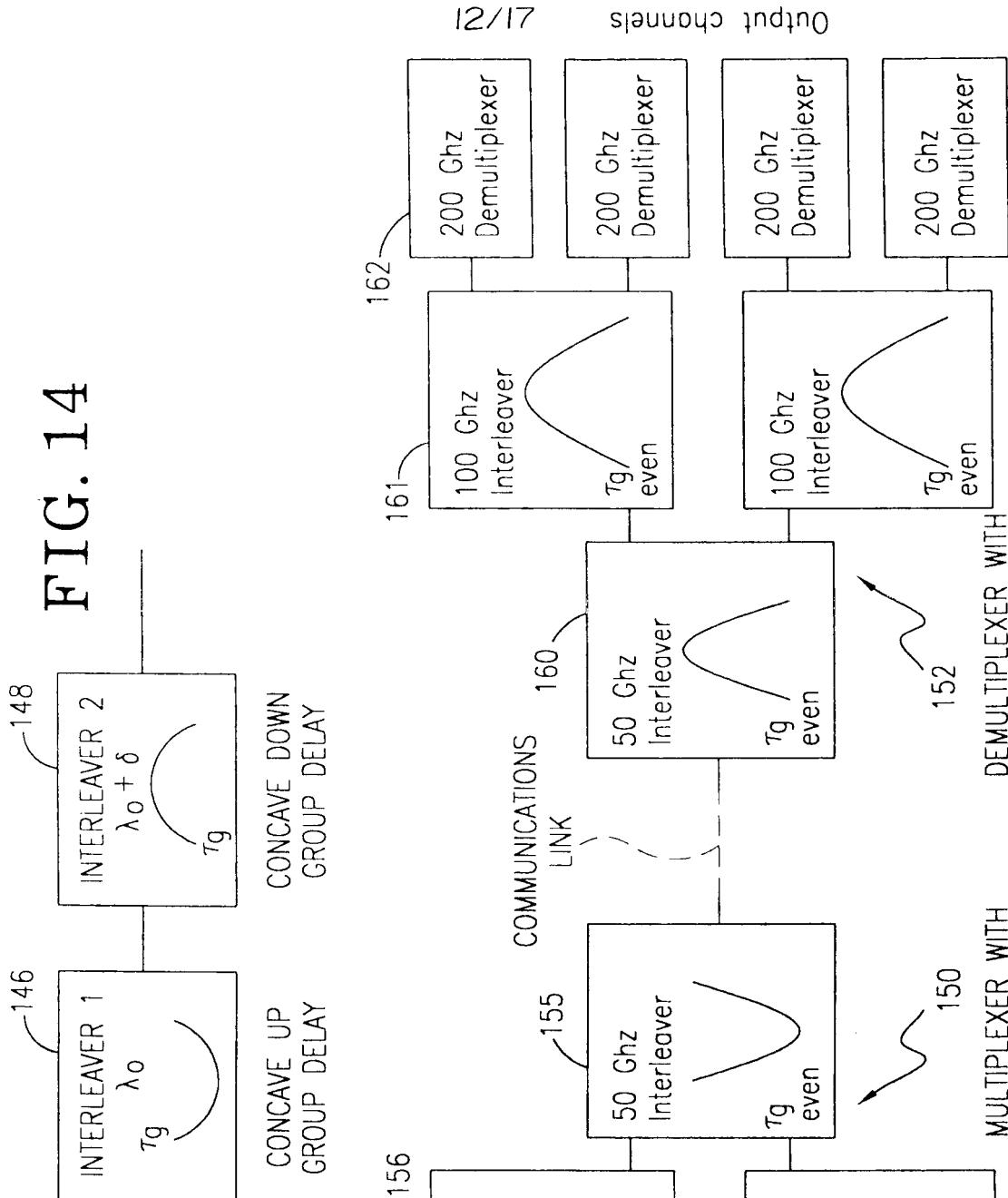


FIG. 14



MULTIPLEXER WITH QUADRATIC UP GROUP DELAY CHARACTERISTICS FOR EVEN CHANNELS
DEMULITPLEXER WITH QUADRATIC DOWN GROUP DELAY CHARACTERISTICS FOR EVEN CHANNELS

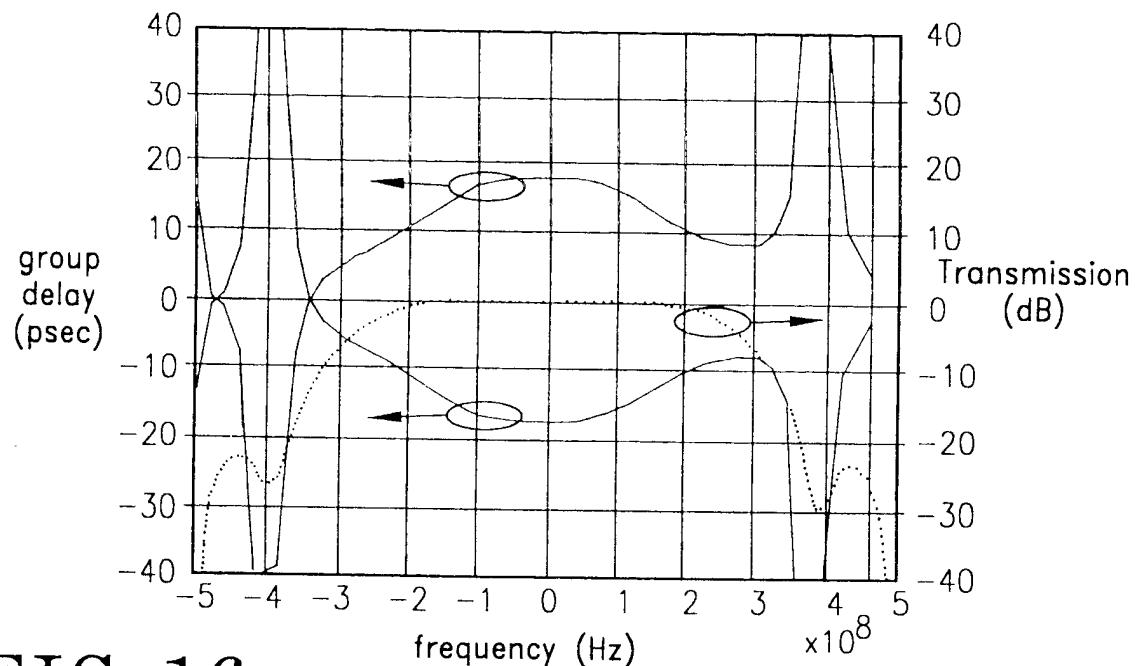


FIG. 16

Calculated group delay for even and odd wavelength channels.

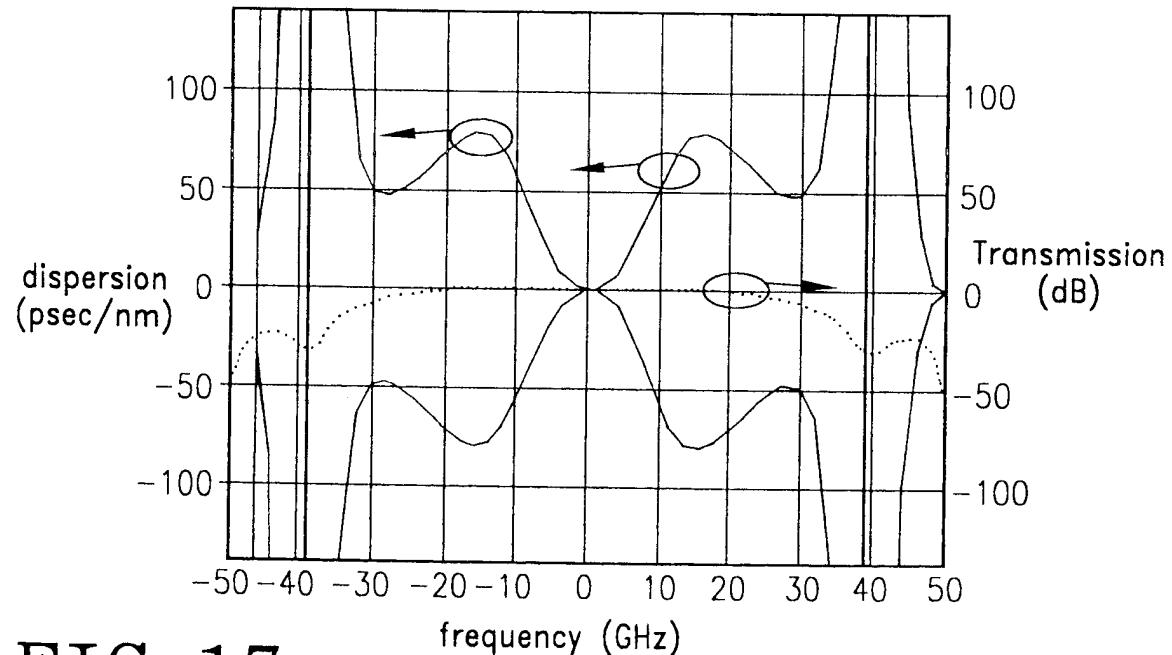
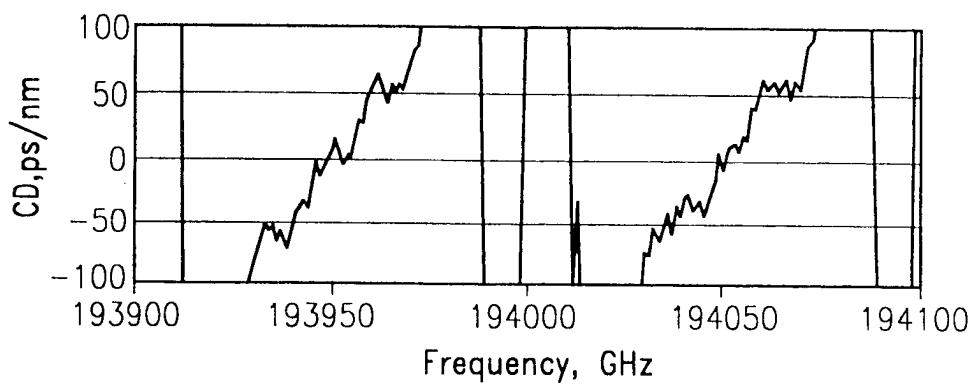


FIG. 17

Calculated chromatic dispersion for even and odd wavelength channels.

50 GHz Interleaver Chromatic Dispersion
Type 1 Channel 2



50 GHz Interleaver Chromatic Dispersion
Type 1 Channel 1

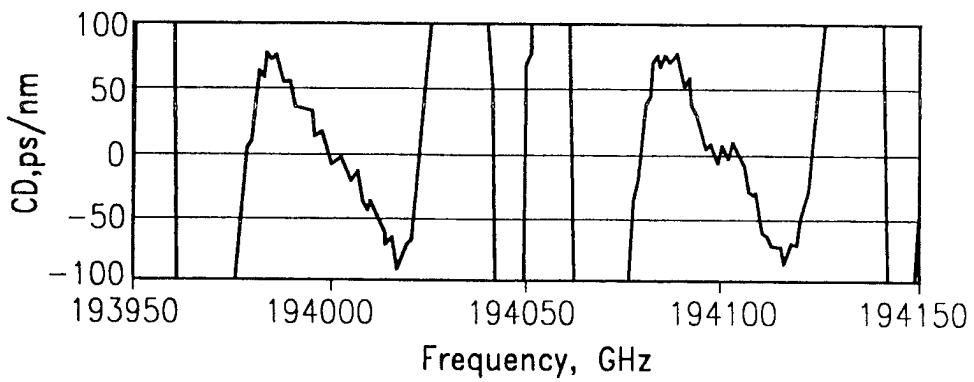
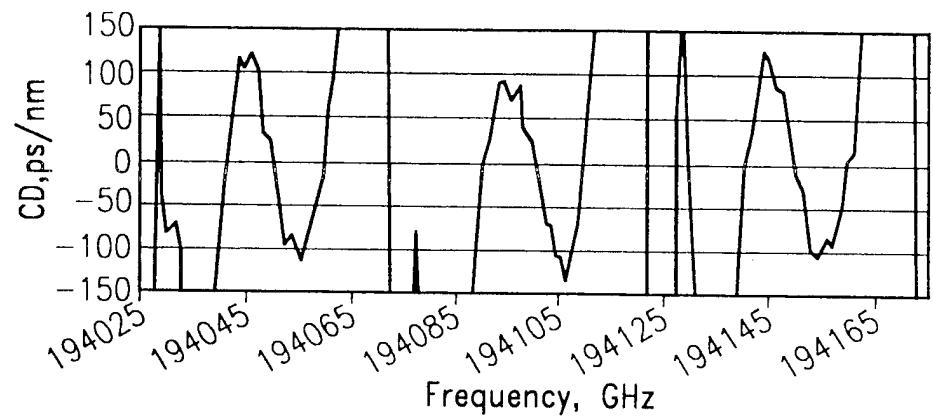


FIG. 18

CD of 50 GHz interleaver

15/17

25 GHz Interleaver Chromatic Dispersion
Type 1 Channel 1



25 GHz Interleaver Chromatic Dispersion
Type 1 Channel 2

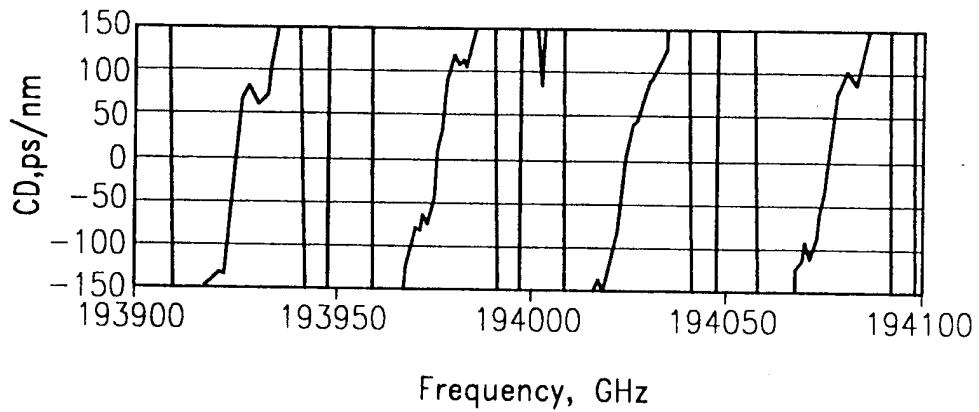


FIG. 19

CD of 25 GHz interleaver

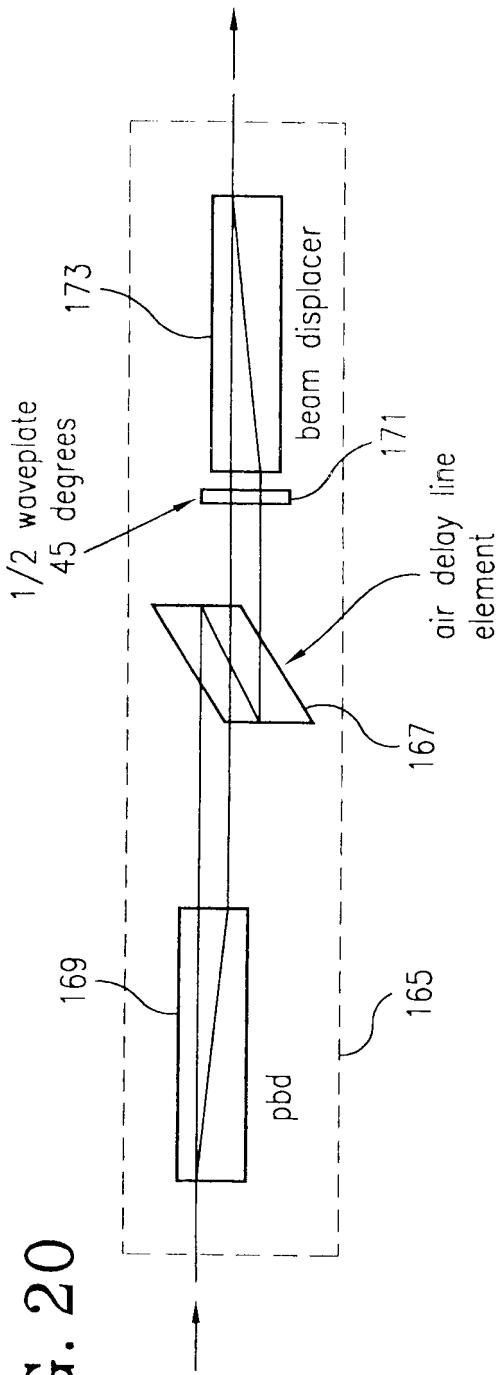
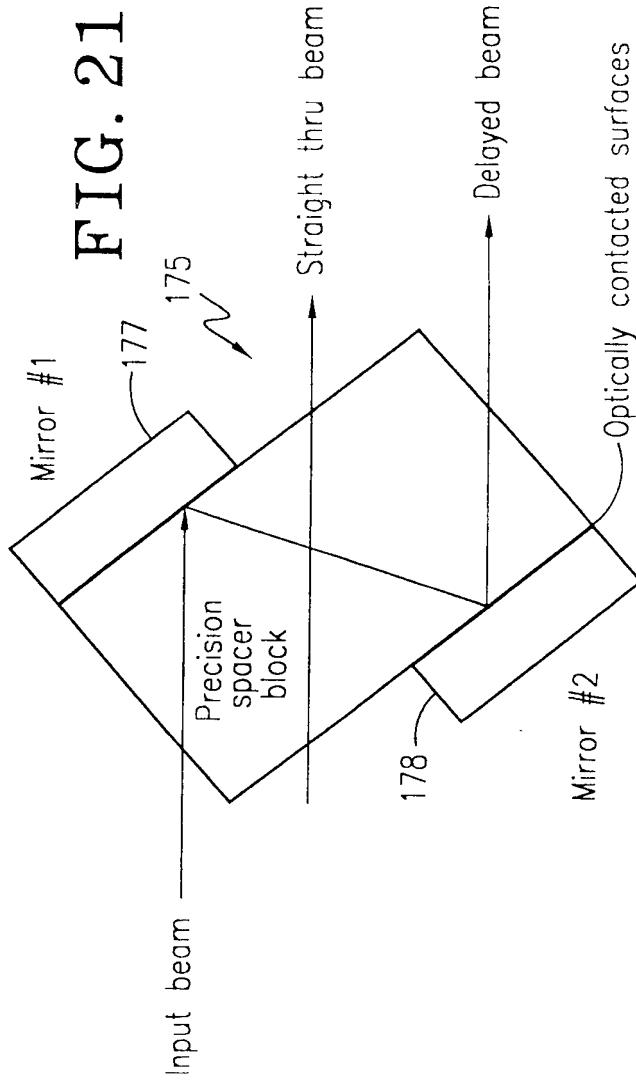
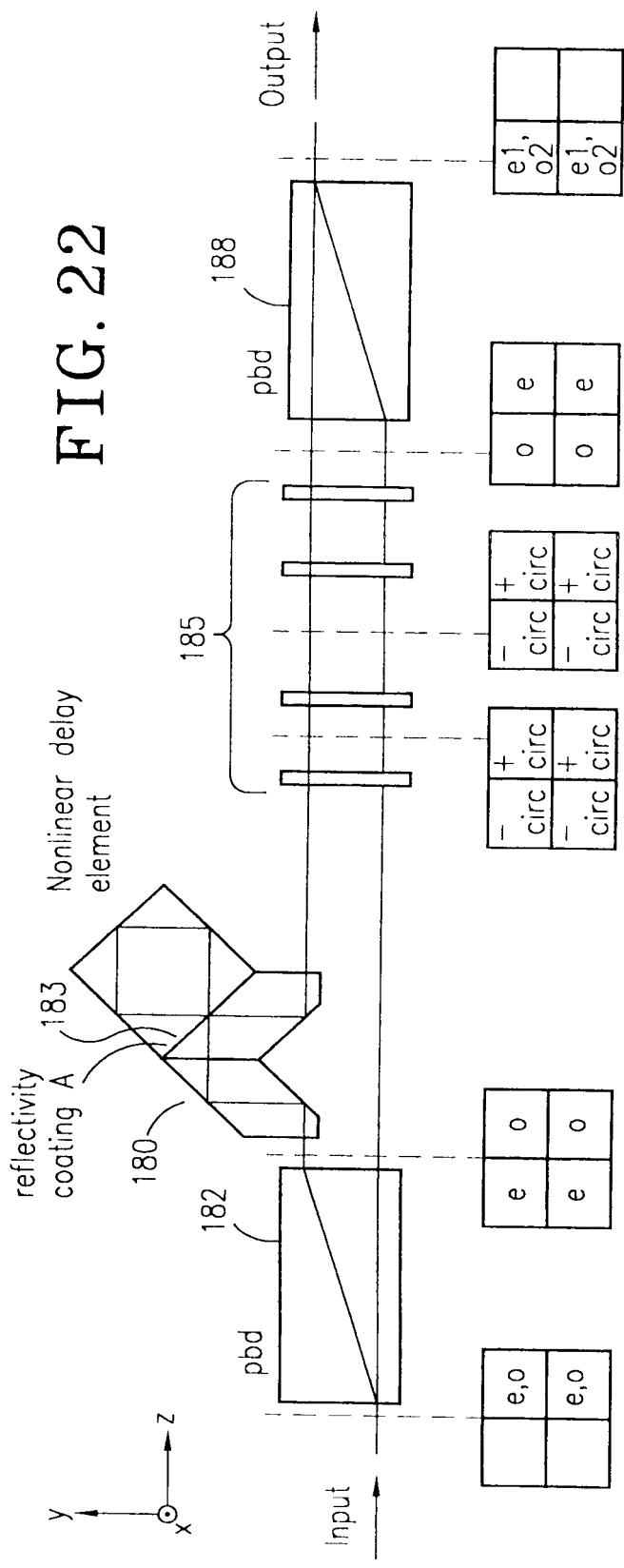
FIG. 20**FIG. 21**

FIG. 22**FIG. 23**